

# Daily Space Weather Summary (SUPARCO)

Thursday, September 15, 2022, 12:16 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

<b>Critical Frequency of F2 layer (foF2)</b>	10.6 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	285 km							
<b>Total Electron Content (TEC)</b>	38 TECU							
<b>Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances</b>								
<b>Distance (Km)</b>	<b>100</b>	<b>200</b>	<b>400</b>	<b>600</b>	<b>800</b>	<b>1000</b>	<b>1500</b>	<b>3000</b>
<b>MUF (MHz)</b>	10.8	11.2	12.7	14.7	17.0	19.4	24.7	29.3
<b>FOT (MHz)</b>	9.2	9.5	10.8	12.5	14.5	16.5	21.0	24.9

Local HF conditions are enhanced as compared to the predicted monthly median MUF.

## LOCAL GEOMAGNETIC CONDITIONS

<b>K-index</b>	0 (Quiet)
<b>Total Field (F) (Son/Isb)</b>	45568/50078 nT

The local geomagnetic field is quiet at the moment.

## LATEST SOLAR CONDITIONS

<b>Sunspot Number (SN)</b>	57
<b>Solar radio flux (F10.7)</b>	144 sfu
<b>Solar wind speed</b>	329.9 km/sec (varied in the past 24 hrs between 285 & 540 km/s)
<b>Solar x-ray flares</b>	C6.2 (max flare in the past 24 hrs: (M1, 1019 UT)
<b>Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)</b>	13.0 nT (varied in the past 12 hrs between 6.1 nT & 15.9 nT) 11.2 nT (varied in the past 12 hrs between -4.5 nT & 13.6 nT)

Solar conditions are at low to moderate levels with background X-ray flux at C-class level.

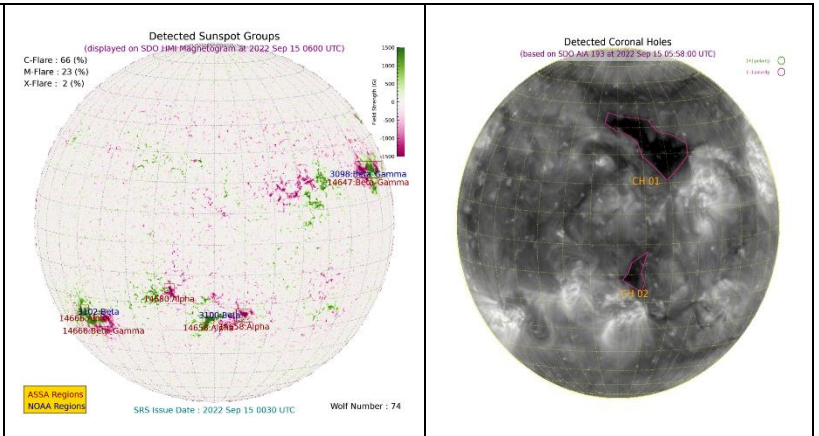
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

Notes: Credits: [www.spaceweather.go.kr](http://www.spaceweather.go.kr), [www.sws.bom.gov.au](http://www.sws.bom.gov.au), [www.spaceweather.com](http://www.spaceweather.com), [www.solen.info](http://www.solen.info)

## Daily Sun: 15 September 2022

There is one active region AR3098 present on the Sun capable of producing strong C and M-class solar flares having chances of 66% and 23% respectively.

02 Coronal Holes (CHs) are detected on the solar disk.



### DISCUSSION:

Solar activity is expected to remain at low to moderate levels. In case of solar flares, minor to moderate radio blackouts are possible. Low solar wind speed and quiet geomagnetic activity is expected. HF conditions are enhanced.